

**Amendments to the Specification:**

Please replace the paragraph starting on page 3, line 10 with the following amended paragraph.

Still another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and [[R<sub>2</sub>]] R<sub>3</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of SEQ ID NO: 3 or SEQ ID NO: 3 with at least one conservative amino acid substitution; SEQ ID NO: 2; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 2; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 2; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 2 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph starting on page 3 line 30 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and [[R<sub>2</sub>]] R<sub>3</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of SEQ ID NO: 5 or SEQ ID NO: 5 with at least one conservative amino acid substitution; SEQ ID NO: 4; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 4; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 4; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 4 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 4, line 16 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and [[R<sub>2</sub>]] R<sub>3</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of

SEQ ID NO: 7 or SEQ ID NO: 7 with at least one conservative amino acid substitution; SEQ ID NO: 6; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 6; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 6; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 6 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 5, line 3 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and R<sub>2</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of SEQ ID NO: 9 or SEQ ID NO: 9 with at least one conservative amino acid substitution; SEQ ID NO: 8; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 8; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 8; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 8 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 5, line 23 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and R<sub>2</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of SEQ ID NO: 74 or SEQ ID NO: 74 with at least one conservative amino acid substitution; SEQ ID NO: 73; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 73; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 73; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 73 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 6, line 10 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and [[R<sub>2</sub>]] R<sub>3</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of an isolated polynucleotide encoding a polypeptide of SEQ ID NO: 76 or SEQ ID NO: 76 with at least one conservative acid substitution; SEQ ID NO: 75; an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 75; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 75; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 75 and encodes a plant lecithin:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 6, line 29 with the following amended paragraph:

Another aspect provides an isolated nucleic acid sequence consisting essentially of 3 0 a polynucleotide of the formula 5' X-(R<sub>1</sub>)<sub>n</sub>-(R<sub>2</sub>)<sub>n</sub>-(R<sub>3</sub>)<sub>n</sub>-Y 3' where X is a hydrogen, Y is a hydrogen or a metal, R<sub>1</sub> and [[R<sub>2</sub>]] R<sub>3</sub> are any nucleic acid, n is an integer between 0-3000, and R<sub>2</sub> is selected from the group consisting of SEQ ID NO: 42 or a degenerate variant thereof, an isolated polynucleotide that has at least 70%, 80%, 90%, or 95% sequence identity with SEQ ID NO: 42; an isolated polynucleotide of at least 10 amino acids that hybridizes under stringent conditions to SEQ ID NO: 42; an isolated polynucleotide complementary to any of the foregoing; and an isolated polynucleotide that hybridizes under stringent conditions to SEQ ID NO: 42 and encodes a acyl CoA:cholesterol acyltransferase-like polypeptide.

Please replace the paragraph on page 9, line 29 with the following amended paragraph:

Figure 1 shows an alignment of yeast (SEQ ID NO: 76), and human (SEQ ID NO: 1) and rat lecithin:cholesterol acyltransferase protein sequences with *Arabidopsis* LCAT1 (SEQ ID NO: 3), LCAT2 (SEQ ID NO: 5), LCAT3 (SEQ ID NO: 7), and LCAT4 (SEQ ID NO: 9) deduced amino acid sequences.